

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | | |
|--|------|------------|----------------------|---------------------|-----------------|--|--|
| 10/510,495 | - | 10/07/2004 | Giuseppe Bisazza | 66434-016 | 66434-016 1549 | | |
| 25269 | 7590 | 06/29/2005 | • | EXAM | EXAMINER | | |
| DYKEMA | | | HOANG, | HOANG, TU BA | | | |
| FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW | | | | ART UNIT | PAPER NUMBER | | |
| WASHINGTON, DC 20005 | | | | 3742 | | | |

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | C | | | |
|---|--|--|---|----------------------|--|--|--|
| | · | 10/510,495 | BISAZZA, GIUSEI | PPE | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Tu Ba Hoang | 3742 | | | | |
| Period fo | The MAILING DATE of this communication apport | pears on the cover sheet with the c | orrespondence ad | ldress | | | |
| THE I - Exter after - If the - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed s will be considered timel the mailing date of this co D (35 U.S.C. § 133). | ly. ommunication. | | | |
| Status | | | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | | |
| 2 a)☐ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) 1-15 is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-15 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | wn from consideration. | | | | | |
| Applicati | ion Papers | | | | | | |
| 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on <u>07 October 2004</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority (| under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 2) Notice 3) Infor | ct(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date 10/07/04. | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | ate | O-152) | | | |

Application/Control Number: 10/510,495 Page 2

Art Unit: 3742

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

A copy of the German patent No. 1,080,740 noted on page 3 of the specification is requested since it is not available to the Examiner.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it should be provided in a separate sheet of paper and the form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: the technical aspect of the invention should be clearly described and shall not be referred to the claim. For examples: the phrase "... is based on the preamble of claims 1 and 5.." noted on page 4, lines 14-15, the phrase "in accordance with claim 1" or "in accordance with claim 5" noted on page 5. Such phases should be deleted or such appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Application/Control Number: 10/510,495 Page 3

Art Unit: 3742

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "in particular for" recited in the preamble renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Furthermore, there is insufficient antecedent basis for "the primary material" recited at line 3 in the claim. Such primary material must be clearly defined. There are also insufficient antecedent bases for "the molten materials" recited at line 7, "said molten batch" recited at line 15, and "the crown" recited at line 16 in the claim. The phrase ".....to reduce to a minimum the head of" recited at lines 18-19 can not be clearly understood. Perhaps there is a missing text between "minimum" and "the head". Clarification is needed.

In claim 4, there is insufficient antecedent basis for "the average specific gather of vatrifiable materials" recited at lines 2-3 in the claim or from the preceding claim. Such "average specific gather" or value must be clearly defined.

Similarly, in claim 5, there is insufficient antecedent basis for "the molten materials" recited at line 4 in the claim since "materials" are more than one and "molten bath" previously cited can only be considered one type of molten material. The phrase ".....to reduce to a minimum the head of" recited at lines 14-15 can not be clearly understood as for the same reason set forth in claim 1 above. Clarification is needed.

In claim 7, the phrase "wherein said electrodes have one longitudinal and rigidly secured" recited at line 2 is unclear and it should be changed to "wherein each of said electrodes has one longitudinal and rigidly end secured".

In claim 9, there is insufficient antecedent basis for "the maximum thickness" recited at line 3 in the claim or from the preceding claim. Such "maximum thickness" should be clearly defined.

In claim 12, the recitation of "these latter" at line 3 renders the claim indefinite. What are "these latter"?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5-6, and 9 are rejected under 35 U.S.C. 102(b) as being anticiapted by Muniz et al (US 5,613,994). Muniz et al shows all features of the claimed inventon including an electric furnace and method for melting vitrifiable material thereof comprising a melting tank 1 having a predetermined head for containing molten bath 10 with a floor 6, side walls 2,3,4,5 made of refractory material, discharging channels 11, a crown or cover shown in Figure 1 situated above the floor 6, a distributor or means for introducing into the tank 1 a primary batch of vitrifiable materials 8 and for depositing a covering layer 9 on the molten bath of glass (column 5, lines 8-11), a plurality of electrodes 7 situated inside the tank 1 to melt and keep in the molten state the vitrifiable

Art Unit: 3742

materials by means of diffused electric currents, wherein each electrode 7 has an overall length and a substantially constant cross-section over its length and a predetermined position within the tank with all electrodes 7 are positioned inside the tank 1 to substantially rest at the same level on the floor 6 to assure an approximately uniform dissipation of energy (column 5, lines 3-6) and the side walls of the tank 1 has a minimum height which is greater than of the maximum value of the head of the tank plus the maximum thickness of the covering layer 8 (as shown in Figure 1).

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Zortea et al (US 4,900,37). Zortea et al shows an electric furnace 21 and method for melting vitrifiable material thereof (Figure 3) comprising a melting tank for containing molten bath 46 with a floor 27 and side walls made of refractory material, discharging channels 30, a crown or cover situated above the floor 27, a distributor or means for introducing into the tank a primary batch of vitrifiable materials or covering layer 24 on the molten bath of glass having a predetermined head, a plurality of electrodes 25,25' situated inside the tank, wherein each electrode has an overall length and a substantially constant cross-section over its length and a predetermined position within the tank to substantially rest at the same level on the floor to assure an approximately uniform dissipation of energy.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or fairly suggest the volume of the primary batch can be limited by containing or keeping the head of the melting tank within predetermined values depending on the diameter of the electrode in the manner recited in claim 2, each of the electrodes has its longitudinal and rigidly ends secured to opposite side walls of the tank in the manner recited in claim 7, the minimum height of the side walls and the diameter of the electrodes defined by claim 10.

Claims 2-4, 7-8, and 10-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/510,495

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu Ba Hoang Primary Examiner Art Unit 3742 Page 5

June 26, 2005